



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/567,504	02/07/2006	Susan J. Leong		6918

7590
Ms. Kam Ling Wong
DeNovo Lighting
167 Westminster Rd.
Brooklyn, NY 11218

10/05/2009

EXAMINER

A, MINH D

ART UNIT	PAPER NUMBER
----------	--------------

2821

MAIL DATE	DELIVERY MODE
-----------	---------------

10/05/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/567,504	Applicant(s) LEONG ET AL.	
	Examiner MINH D. A	Art Unit 2821	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-69 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-69 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

This is a response to the Applicants' filing on 02/07/2006. In virtue of this filing, claims 1-69 are currently presented in the instant application.

Double Patenting

1. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

2. Claims 1-57, 59-67 and 69 are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-14, 16-52, 55-69 of prior U.S. Patent No. 7, 067,992)(Appl No: 11/052,328). This is a double patenting rejection.

Regarding claim 1, claim 1 of Patent No.(992) disclose a light emitting diode (LED) lamp for mounting to an existing fixture for a fluorescent lamp having a ballast assembly including ballast opposed electrical contacts, comprising: a tube having tube ends, at least one LED positioned within said tube between said tube ends, electrical circuit means for providing electrical power from the ballast assembly to said at least one LED, means for electrically connecting said electrical circuit means with the ballast opposed electrical contacts, said electrical circuit means including an LED electrical circuit including at least one electrical string positioned within said tube and generally extending between said tube ends, said at least one LED being in electrical connection

Art Unit: 2821

with said at least one electrical string, said at least one LED being positioned to emit light through said tube, means for supporting and holding said at least one LED and said LED electrical circuit, means for suppressing ballast voltage being delivered from the ballast assembly, said means for suppressing ballast voltage being in electrical connection with said electrical circuit means, and means for controlling the delivery of said electrical power from said ballast assembly to said at least one LED.

Regarding claim 2, claim 2 of Patent No. (992) disclose the LED lamp in accordance with claim 1, wherein said means for controlling includes an on-off switch positioned in said LED lamp on said electrical circuit in operative association with said at least one LED, said switch being operable between an on mode wherein electrical power is delivered to said at least one LED and an off mode wherein said electrical power is not delivered to said at least one LED.

Regarding claim 3, claim 3 of Patent No. (992) discloses a manual control unit positioned external to said tube in signal communication with said switch, said manual control unit being manually operable between an activation mode wherein a control signal is sent to said switch to activate said switch to said on mode and a deactivation mode wherein a control signal is sent to said switch to deactivate said switch to said off mode.

Regarding claim 4, claim 4 of Patent No. (992) discloses the LED lamp in accordance with claim 3, further including a control signal path from said manual control unit to said switch.

Regarding claim 5, claim 5 of Patent No. (992) discloses the LED lamp in accordance with claim 4, wherein said control signal path comprises a control signal line wire.

Regarding claim 6, claim 6 of Patent No. (992) discloses the LED lamp in accordance with claim 4, wherein said control signal path comprises a wireless signal.

Regarding claim 7, claim 7 of Patent No. (992) discloses the LED lamp in accordance with claim 4, further including an external source of AC power and a PLC line connecting said source of AC power with said switch, and wherein said control signal path comprises a control signal line wire connected to said PLC line.

Regarding claim 8, claim 8 of Patent No. (992) discloses the LED lamp as set forth in claim 2, wherein said means for controlling includes a timer positioned in said tube in operative signal association with said switch.

Regarding claim 9, claim 9 of Patent No. (992) discloses the LED lamp as set forth in claim 8, further including a manual timer control unit positioned external to said tube in operative signal association with said timer, said manual timer control unit being manually controllable to signal set times to signal said switch to activate to said on mode and to deactivate to said off mode in accordance with said set times.

Regarding claim 10, claim 10 of Patent No. (992) discloses the LED lamp in accordance with claim 9, further including a control signal path from said manual timer control unit to said timer.

Regarding claim 11, claim 11 of Patent No. (992) discloses the LED lamp in accordance with claim 10, wherein said control signal path comprises a control signal line wire.

Regarding claim 12, claim 12 of Patent No. (992) disclose the LED lamp in accordance with claim 10, wherein said control signal path comprises a wireless signal.

Regarding claim 13, claim 13 of Patent No. (992) discloses the LED lamp in accordance with claim 10, further including an external source of AC power and a PLC line connecting said source of AC power with said timer, and wherein said control signal path comprises a control signal line wire connected to said PLC line.

Regarding claim 14, claim 14 of Patent No.(992) discloses the LED lamp in accordance with claim 9, said timer being preset to set times to signal said switch to activate said switch to said switch on mode and to deactivate said switch to said switch off mode in accordance with said set times.

Regarding claim 15, claim 16 of Patent No.(992) discloses the LED lamp in accordance with claim 2, further including an occupancy motion sensor in operative signal association with said switch wherein said sensor sends a signal to said switch to operate said switch to a closed mode when motion is detected in the illumination area of said LED lamp wherein power is transmitted to said LED array to illuminate and further wherein said sensor sends a signal to said switch to operate said switch to an open mode when motion is not detected in the illumination area of said LED lamp wherein power is not transmitted to said LED array and illumination from said LED array ceases.

Regarding claim 16, claim 17 of Patent No. (992) discloses the LED lamp in accordance with claim 15, wherein said motion sensor is positioned within said lamp.

Regarding claim 17, claim 18 of Patent No. (992) discloses the LED lamp in accordance with claim 16, wherein said motion sensor is positioned external to said lamp.

Regarding claim 18, claim 19 of Patent No. (992) discloses the LED lamp in accordance with claim 17, further including a control signal path from said sensor to said switch.

Regarding claim 19, claim 20 of Patent No. (992) discloses the LED lamp in accordance with claim 18, wherein said control signal path comprises a control signal line wire.

Regarding claim 20, claim 21 of Patent No. (992) discloses the LED lamp in accordance with claim 18, wherein said control signal path comprises a wireless signal.

Regarding claim 21, claim 22 of Patent No. (992) discloses the LED lamp in accordance with claim 18, further including an external source of AC power and a PLC line connecting said source of AC power with said switch, and wherein said control signal path comprises a control signal line wire connected to said PLC line.

Regarding claim 22, claim 21 of Patent No. (992) discloses the LED lamp in accordance with claim 1, wherein said means for controlling includes a current driver dimmer positioned in said LED lamp and in operative signal and power association with said at least one LED, said dimmer being for regulating the amount of power provided by said electrical power to said at least one LED.

Regarding claim 23, claim 24 of Patent No. (992) discloses the LED lamp in accordance with claim 22, further including a computer positioned in said lamp in operative power and signal association with said dimmer wherein said computer includes computer controls for signaling said dimmer to regulate the degree of power input to said at least one LED to control the degree of illumination by said at least one LED.

Regarding claim 24, claim 25 of Patent No. (992) discloses the LED lamp in accordance with claim 23, wherein said computer controls include signaling said dimmer to reduce power sent to said at least one LED by a set amount.

Regarding claim 25, claim 26 of Patent No. (992) discloses the LED lamp in accordance with claim 23, wherein said computer controls include signaling said dimmer to provide full power to said at least one LED.

Regarding claim 26, claim 27 of Patent No. (992) discloses the LED lamp in accordance with claim 23, further including a manual control unit for signaling said computer to set power settings for said computer controls, said manual control unit being positioned external to said tube.

Regarding claim 27, claim 28 of Patent No.(992) discloses the LED lamp in accordance with claim 26, wherein said manual control unit is also for signaling said computer relating to preset times relating to activation of said power settings for said computer controls.

Regarding claim 28, claim 29 of Patent No. (992) discloses the LED lamp in accordance with claim 27, further including a control signal path from said manual control unit to said computer.

Regarding claim 29, claim 30 of Patent No. (992) discloses the LED lamp in accordance with claim 28, wherein said control signal path comprises a control signal line wire.

Regarding claim 30, claim 31 of Patent No. (992) discloses the LED lamp in accordance with claim 28, wherein said control signal path comprises a wireless signal.

Regarding claim 31, claim 32 of Patent No. (992) discloses the LED lamp in accordance with claim 28, further including an external source of AC power and a PLC line connecting said source of AC power with said computer, and wherein said control signal path comprises a control signal line wire connected to said PLC line.

Regarding claim 32, claim 33 of Patent No. (992) discloses the LED lamp in accordance with claim 23, further including a switch in operative signal control with said computer wherein operation of said switch activates said computer to regulate the degree of power input to said at least one LED to control the degree of illumination by said at least one LED.

Regarding claim 33, claim 34 of Patent No. (992) discloses the LED lamp in accordance with claim 32, said switch being positioned external to said tube.

Regarding claim 34, claim 35 of Patent No. (992) discloses the LED lamp in accordance with claim 33, further including a timer in operative signal connection with said switch for providing preset times of operating said switch to send signals to said

Art Unit: 2821

computer to signal said dimmer to control the degree of power input to said at least one LED.

Regarding claim 35, claim 36 of Patent No. (992) discloses the LED lamp in accordance with claim 34, said timer being positioned external to said tube and being manually operable to set times for operation of said switch to signal said computer at preset times to operate said dimmer to regulate the degree of power input to said at least one LED.

Regarding claim 36 claim 37 of Patent No. (992) discloses the LED lamp in accordance with claim 35, further including a control signal path from said switch to said computer.

Regarding claim 37, claim 38 of Patent No. (992) discloses the LED lamp in accordance with claim 36, wherein said control signal path comprises a control signal line wire.

Regarding claim 38, claim 39 of Patent No. (992) discloses the LED lamp in accordance with claim 36, wherein said control signal path comprises a wireless signal.

Regarding claim 39, claim 40 of Patent No. (992) discloses the LED lamp in accordance with claim 36, further including an external source of AC power and a PLC line connecting said source of AC power with said computer, and wherein said control signal path comprises a control signal line wire connected to said PLC line.

Regarding claim 40, claim 41 of Patent No. (992) discloses the LED lamp in accordance with claim 34, wherein said timer and said switch are positioned within said tube, said timer being preset for times of operation of said switch between on and off

Art Unit: 2821

modes for signaling said computer to operate said dimmer at preset times at preset degrees of power input to said at Regarding claim 1, claim 1 of Patent No. (992) least one LED.

Regarding claim 41, claim 42 of Patent No. (992) discloses the LED lamp in accordance with claim 23, further including an occupancy motion sensor in operative signal connection with said computer.

Regarding claim 42, claim 43 of Patent No. (992) discloses the LED lamp in accordance with claim 41, said sensor being for signaling said computer upon detection of motion and upon lack of detection of motion in the illumination area of said at least one LED.

Regarding claim 43, claim 44 of Patent No. (992) discloses the LED lamp in accordance with claim 41, wherein said sensor is positioned within said tube.

Regarding claim 44, claim 45 of Patent No. (992) discloses the LED lamp in accordance with claim 43~ wherein said sensor is positioned external to said tube.

Regarding claim 45, claim 46 of Patent No. (992) discloses the LED lamp in accordance with claim 44, further including a control signal path from said switch to said computer.

Regarding claim 46, claim 47 of Patent No. (992) discloses the LED lamp in accordance with claim 45, wherein said control signal path comprises a control signal line wire.

Regarding claim 47, claim 48 of Patent No. (992) discloses the LED lamp in accordance with claim 45, wherein said control signal path comprises a wireless signal.

Regarding claim 48, claim 49 of Patent No. (992) discloses the LED lamp in accordance with claim 45, further including an external source of AC power and a PLC line connecting said source of AC power with said computer, and wherein said control signal path comprises a control signal line wire connected to said PLC line.

Regarding claim 49, claim 50 of Patent No.(992) discloses the LED lamp in accordance with claim 43, including another LED lamp having another at least one LED positioned in another tube including other electrical power and another ballast assembly and other means for controlling the delivery of said other electrical power from said another ballast assembly to said another LED lamp, said another LED lamp further including another current driver dimmer in operative signal and power association with said another at least one LED, said another dimmer being positioned in said another tube, said another dimmer being for regulating the amount of power provided by said other electrical power to said another at least one LED, said another LED lamp having another sensor positioned in said another tube, said another occupancy motion sensor being for detection of motion and lack of detection of motion in the illumination area of said another at least one LED.

Regarding claim 50, claim 51 of Patent No.(992) discloses the LED lamp in accordance with claim 49, wherein said computer and said another computer are in network signal communication with said sensor and with said another sensor, wherein sensor data signals received by said computer and by said another computer are continuously compared in accordance with a computer program, wherein said computer signals said dimmer and said another computer signals said another dimmer, and

Art Unit: 2821

wherein the regulation of power outputs of said dimmer and said another dimmer to said at least one LED and said another at least one LED, respectively, are equal.

Regarding claim 51, claim 52 of Patent No. (992) discloses the LED lamp in accordance with claim 50, wherein the power outputs of said dimmer and said another dimmer are reduced to a less than full power output when both said sensor and said another sensor detect no occupancy motion and wherein the power outputs of both said dimmer and said another dimmer are increased to a full power output when either said sensor or said another sensor detect occupancy motion.

Regarding claim 52, claim 55 of Patent No. (992) discloses the LED lamp in accordance with claim 1, wherein said means for supporting and holding said at least one LED and said LED electrical circuit being positioned within said tube between said tube ends.

Regarding claim 53, claim 56 of Patent No. (992) discloses the LED lamp in accordance with claim 1, wherein said electrical circuit means for providing electrical power from the ballast assembly to said at least one LED includes at least one metal substrate circuit board.

Regarding claim 54, claim 57 of Patent No.(992) discloses the LED lamp in accordance with claim 53, further including means for supporting and holding said at least one LED and said LED electrical circuit, said means for supporting being said at least one metal substrate circuit board positioned within said tube between said tube wall ends.

Regarding claim 55, claim 58 of Patent No. (992) discloses the LED lamp in accordance with claim 1, wherein said at least one LED is a plurality of LEDs.

Regarding claim 56, claim 59 of Patent No. (992) discloses the LED lamp in accordance with claim 1, wherein said at least one LED is an OLED.

Regarding claim 57, claim 60 of Patent No. (992) discloses the LED lamp in accordance with claim 1, wherein said at least one LED is a high-brightness LED.

Regarding claim 59, claim 61 of Patent No. (992) discloses the LED lamp in accordance with claim 1, wherein said electrical circuit means further including at least one full wave bridge rectifier for converting AC voltage received from said ballast assembly to DC voltage.

Regarding claim 60, claim 62 of Patent No. (992) discloses the LED lamp in accordance with claim 59, further including at least one non-polarized capacitor in electrical series communication with said ballast opposed electrical contacts.

Regarding claim 61, claim 62 of Patent No. (992) discloses the LED lamp in accordance with claim 60, further including at least one resistor in electrical series communication with said ballast opposed electrical contacts.

Regarding claim 62, claim 63 of Patent No. (992) discloses the LED lamp in accordance with claim 61, further including at least one diode in electrical parallel communication with said ballast opposed electrical contacts.

Regarding claim 63, claim 64 of Patent No. (992) discloses the LED lamp in accordance with claim 62, wherein said at least one diode is at least one Schottky diode.

Regarding claim 64, claim 65 of Patent No. (992) discloses the LED lamp in accordance with claim 1, wherein said means for suppressing ballast voltage includes at least one voltage surge absorber (ZNR) in electrical parallel communication with said ballast opposed electrical contacts.

Regarding claim 65, claim 66 of Patent No. (992) discloses the LED lamp in accordance with claim 1, wherein said means for suppressing ballast voltage includes at least one moister (MOV) in electrical parallel communication with said ballast opposed electrical contacts.

Regarding claim 66, claim 67 of Patent No. (992) discloses the LED lamp in accordance with claim 1, wherein said means for suppressing ballast voltage includes at least one varistor in electrical parallel communication with said ballast opposed electrical contacts.

Regarding claim 67, claim 68 of Patent No. (992) discloses the LED lamp in accordance with claim 1, further including at least one filter capacitor in parallel with said at least one LED electrical string.

Regarding claim 68, claim 69 of Patent No. (992) discloses the LED lamp in accordance with claim 23, wherein said computer is a logic gate array positioned in said lamp in operative power and signal association with said dimmer.

Regarding claim 69, claim 15 Patent No. (992) discloses the LED lamp in accordance with claim 8, wherein said timer is a computer positioned in said tube in operative signal association with said switch.

Art Unit: 2821

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claim 58 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 54 of U.S. Patent No. 7, 067,992)(Appl No: 11/052,328). Although the conflicting claims are not identical, they are not patentably distinct from each other because this difference is not of patent able merit, since claim 54 of patent discloses all limitations.

Claim 68 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 53 of U.S. Patent No. 7, 067,992)(Appl No: 11/052,328). Although the conflicting claims are not identical, they are not patentably distinct from each other because this difference is not of patent able merit, since claim 53 of patent discloses all limitations.

Except for the claim Objections and the double patenting problem as out lined above, no other prior art of records were found to disclose or make obvious the key features of the applicant's invention.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Dieu A whose telephone number is (571) 272-1817. The examiner can normally be reached on M-F (5:30 AM-2:45 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callahan Timothy can be reached on (571) 272-1740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/567,504
Art Unit: 2821

Page 17

Examiner

Minh A

Art Unit 2821

Date 9/20/09

/Douglas W Owens/
Supervisory Patent Examiner, Art Unit 2821
October 1, 2009